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EXAMINER

JUSKA, CHERYL ANN

ART UNIT PAPER NUMBER

1771

DATE MAILED: 01/15/2003

21

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-21

**Office Action Summary**

Application No.

08/928,156

Applicant(s)

BERSTED ET AL.

Examiner

Cheryl Juska

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 October 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 92-113, 118-124 and 128-139 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 92-113, 118-124 and 128-139 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Amendment E, submitted as Paper No. 20 on October 15, 2002, has been entered. Claims 114-117 and 125-127 have been cancelled, while claims 92, 93, 95, 97, 99, 101-103, 105, 106, 109, 110, 113, 118, 121, and 124 have been amended as requested. New claims 128-139 have been added. Thus, the pending claims are 92-113, 118-124, and 128-139.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 92-113, 118-124, and 128-139 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claims 92 and 105 limit the polypropylene homopolymer to having a melting temperature of "above about 160°C." Applicant cites the teaching of the specification at page 28, lines 6-12, page 51, lines 25-32, and page 45, lines 2-3 as support for said limitation. Applicant states, "It follows, and would be readily understood by persons skilled in the art, that the preferred crystalline homopolymer polypropylene is one that melts above about 160°C." The Examiner respectfully disagrees.

Specifically, the specification at page 45, lines 2-3 clearly teaches the polypropylene homopolymer which is preferred has a melting temperature of about 168°C. This teaching is not sufficient support for the new claim limitation of a melting temperature “above about 160°C.” Additionally, the teaching that the polypropylene filaments are heat treated at a temperature within 20°C of the melting temperature of said polypropylene with a preferred heat treatment temperature of about 150-160°C does not provide support for a melting temperature of “above about 160°C.” Rather, said teaching would be understood by one skilled in the art to mean a melting temperature of the polypropylene homopolymer to be within a range of about 150-180°C (i.e., 0-20° above 150° equals 150-170°C and 0-20 above 160° equals 160-180°C). Thus, 92-113, 118-124, and 128-139 are rejected as containing new matter.

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 92-113 and 118-124 stand rejected under 35 USC 103(a) as being unpatentable over US 5,455,305 issued to Galambos, as set forth in section 5 of the last Office Action.

Independent claim 92 has been amended to limit the crystalline polypropylene homopolymer to having a melting temperature of above about 160°C. However, said amendment is insufficient to overcome said rejection, since Galambos explicitly teaches the isotactic polypropylene homopolymer has a melting temperature of “about 159-169°C, for example about 162°C” (col. 7, lines 55-57). Thus, the 103 rejection of claims 92-104 is maintained.

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With respect to independent claim 105, Amendment E limits the filaments to 'consist of' a blend of (a) crystalline polypropylene homopolymer having a melting point above about 160°C and (b) up to 10 pbw of at least one other polymer per 100 pbw of said homopolymer.

Dependent claim 110 limits the melting temperature to about 168°C. Since Galambos teaches filaments that are a blend of 5-50 pbw of a syndiotactic polypropylene with the polypropylene homopolymer (e.g., an overlap with Applicant's claims of 5-10 pbw) (abstract), the rejections of claims 105-113 and 118-124 are maintained.

6. New claims 128-139 are rejected under 35 USC 103(a) as being unpatentable over US 5,455,305 issued to Galambos.

New claims 128, 132, and 138 limit the melting temperature of the homopolymer of claims 93, 97, and 118, respectively, to about 168°C. As discussed above, Galambos clearly teaches this limitation.

New claims 129, 133, and 137 are drawn to a carpet having face yarn of the yarn of claims 128, 132, and 136. Galambos clearly teaches the yarn as carpet face yarn (col. 1, lines 7-8).

New claims 130, 131, 134, 135, 138, and 139 limit the yarn of claims 128, 132, and 136, to having a Plug Crush Recovery (PCR) value of at least 87% and 90%, respectively. As noted in the last Office Action, Galambos does not teach Applicant's method of measuring resiliency (i.e., claimed PCR values), so the Examiner cannot possibly make a direct comparison of the prior art and the present invention. However, it is asserted that these values would be met the Galambos invention having a bulk level of 2-20%, since the prior art meets all the structural limitations (i.e., BCF yarn, denier, bulk, twist, filaments per yarn) and chemical limitations (i.e.,

polypropylene homopolymer or blend with another polymer, with or without additives) claimed by Applicant. Therefore, said claims are rejected as being obvious over the cited prior art.

7. Claims 92-104 stand rejected under 35 USC 103(a) as being unpatentable over US 5,486,419 issued to Clementini, as set forth in section 5 of the last Office Action.

As with the above Galambos rejection, Clementini also explicitly teaches the isotactic polypropylene homopolymer has a melting temperature of “about 159-169°C, for example about 162°C” (col. 11, lines 32-34). Thus, the 103 rejection of claims 92-104 is maintained.

8. New claims 128-135 are rejected under 35 USC 103(a) as being unpatentable over the cited Clementini patent.

#### ***Response to Arguments***

9. Applicant’s arguments submitted with Amendment E have been carefully considered but have not been found persuasive.

10. Specifically, Applicant traverses the above 103 rejections by arguing that (a) both Galambos and Clementini expressly teach the crystalline polypropylene homopolymer of the present invention to be deficient in yarn resiliency and (b) the claimed polypropylene homopolymer is different in composition from the inventive polypropylenes of Galambos and Clementini (Amendment E, page 8, 1<sup>st</sup> paragraph).

11. In response to the former argument, the Examiner appreciates the background teachings of the references with respect to resiliency of known crystalline polypropylene homopolymer carpet yarns. However, it is noted that Applicant’s claims are not rejected over said yarns, but

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rather the inventive yarns of Galambos and Clementini, which have improved resiliency. Thus, said references do not teach away from the present invention, as Applicant contends.

12. In response to the latter argument, the Examiner respectfully disagrees. In particular, Applicant notes that the syndiotactic polypropylene of Galambos does not having a melting temperature above 160°C (Amendment E, page 10, lines 24-30). However, Galambos does not employ said sPP alone in the carpet yarn, but rather said yarn is comprised of a blend of sPP with the polypropylene homopolymer. Hence, the improved resiliency over conventional polypropylene homopolymer yarns. Since Applicant's claim 92 does not exclude such a blend, the rejections of said claim and its dependents over Galambos are maintained. Additionally, since claim 105 recites such a blend, the rejections of said claim and its dependents are also maintained.

13. Applicant also asserts that the blends disclosed by Galambos that have improved resiliency contain greater amounts of sPP than allowed by the present claims (Amendment E, page 11, lines 3-6). In response, it is reiterated that the present claims overlap with the explicit teachings of Galambos by an amount of 5-10 pbw of another polymer.

14. In response to Applicant's assertion that improved resiliency is only realized by Galambos with blends comprising at least 25 pbw sPP and that amounts less than this are only indicated as "capable of improved properties" (Amendment E, page 11, 2<sup>nd</sup> and 3<sup>rd</sup> paragraphs) it is argued that the teaching of Galambos still clearly suggests to one skilled in the art that improved resiliency can be obtained from blends of 5-10 pbw of another polymer (i.e., sPP). Additionally, it is reiterated that the claim rejections are an obviousness rejection with respect to the bulk levels. Hence, with bulk levels within the range presently claimed, the yarns of

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Galambos must have the same PCR due to the like chemical and structural features. Applicant has not shown evidence to the contrary. Therefore, said rejections over Galambos are hereby maintained.

15. In response to the assertion that Clementini's inventive polypropylene is different in composition from the presently claimed polypropylene homopolymer, it is first noted that the rejection of claim 105 and its dependents has been withdrawn due to the limitation of up to 10 pbw of another polymer since Clementini clearly teaches the polypropylene homopolymer only in an amount of up to 70% (i.e., at least 30% of another polymer). However, the rejection of claim 92 and its dependents have been maintained since Applicant's claims do not limit the amount of polypropylene homopolymer present.

### ***Conclusion***

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,



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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



CHERYL A. JUSKA  
PRIMARY EXAMINER

cj  
January 12, 2003